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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,752	04/10/2000	David W. Moore	ST9-99-122	2720

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KUNZLER & ASSOCIATES
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SALT LAKE CITY, UT 84111

EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 03/10/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/545,752

Applicant(s)

MOORE ET AL.

Examiner

HUNG Q PHAM

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-13,15-21,23,24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-13,15-21,23,24 and 26-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As in claims 19 and 30, the step of *generating a query to prompt for a detail record associated with the database data set* is not disclosed in the specification.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted

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by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,594,676. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they use the same limitations.

U.S.P. 6,594,676	APPLICATION
<p>1. An apparatus for recovering a failed database data set comprising a plurality of database records, the apparatus comprising</p> <p>a memory device storing executable modules, the modules comprising:</p> <p>a backup copy restore utility configured to read and restore a backup copy of the database data set, wherein the backup copy reflects contents of the database data set up to a backup time point, wherein a log comprises a plurality of confirmed updates to the database data set that were made subsequent to the backup time point and that have been confirmed as being committed, and wherein the log also comprises a plurality of unconfirmed updates to the database data set that were made subsequent to the backup time point and that have not been confirmed as being committed;</p> <p>a change accumulation manager configured to:</p> <p>access a change accumulation data set that comprises a plurality of detail records and a plurality of spill records, wherein each detail record corresponds to one of the plurality of database records and reflects all</p>	<p>1. An apparatus for recovering a failed database data set, the apparatus comprising:</p> <p>a memory device storing executable modules, the modules comprising:</p> <p>a recovery utility having:</p> <p>a backup copy restore utility configured to read and restore a backup copy of the database set;</p> <p>a change accumulation manager configured to</p>

<p>of the confirmed updates to the corresponding database record, and wherein each spill record comprises an unconfirmed update to the database data set; and</p> <p>read the change accumulation data set to obtain the plurality of detail records;</p> <p>a log manager configured to read the log to obtain the plurality of unconfirmed updates; and determine which of the plurality of unconfirmed updates have been committed;</p> <p>an image copy restore utility configured to apply the plurality of detail records to the backup copy to thereby create a restored database data set; and</p> <p>a database update manager configured to apply the plurality of unconfirmed updates determined to have been committed to the restored database data set.</p> <p>2. The apparatus of claim 1 wherein the image copy restore utility is configured to apply the detail records to the backup copy during restoration of the backup copy.</p> <p>3. The apparatus of claim 1 wherein the database update manager is configured to apply the updates after the backup copy is restored.</p>	<p>read a change accumulation data set to derive detail records in parallel with the read and restore of the backup copy;</p> <p>an image copy restore utility configured to apply the detail records to the backup copy to thereby create a restored database data set;</p> <p>a database update manager configured to apply the updates to the restored database data set;</p>
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4. The apparatus of claim 1 wherein the log manager is configured to read a plurality of logs simultaneously to derive updates subsequent to the merge end point.

5. The apparatus of claim 1 wherein the recovery utility further comprises
a merge end point utility configured to determine the merge end point reflective of a separation of detail and spill records in the log.

6. The apparatus of claim 1 wherein the backup copy restore utility and the change accumulation manager are configured to read simultaneously.

7. The apparatus of claim 1 wherein the recovery utility is further configured to identify the backup copy, the log, and the incomplete change accumulation data set relating to the failed database data set.

8. The apparatus of claim 1 further comprising a virtual memory and wherein the change accumulation manager is configured to store at least a portion of the detail records in the virtual memory.

9. The apparatus of claim 1 wherein the image copy restore utility is configured to send a query to the change accumulation manager for a detail record associated with the database data set.

a log manager is configured to read a log to derive updates subsequent to a merge end point;

a merge end point utility configured to determine the merge end point reflective of a separation of detail and spill records in a log;

<p>10. The apparatus of claim 9 wherein the change accumulation manager is configured to save the query if the detail record has not yet been read by the change accumulation manager and further configured to send the detail record to the image copy restore process if the detail record has been read by the change accumulation manager.</p>	
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As shown in the chart, the subject matter claimed in the instant application is fully disclosed in the U.S. Patent No. 6,594, 676, the difference between claims 1, 11 and 21 with U.S. Patent No. 6,594,676 is the change accumulation manager reads the change accumulation data set *in parallel with the read and restore of the backup copy*. However, U.S. Patent No. 6,594,676 teaches the backup copy restore utility and the change accumulation manager are configured to read simultaneously (U.S. Patent No. 6,594,676, Claim 6, Col. 14, Lines 14-16), and the backup copy restore utility is to read and restore a backup copy (U.S. Patent No. 6,594,676, Claim 1, Col. 13, Lines 35-36). Because they are configured to process simultaneously, thus, the processes of the backup copy restore utility, and the change accumulation manager are in parallel. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the U.S. Patent No. 6,594,676 technique as discussed performs the change accumulation manager reads the change accumulation data set *in parallel with the read and restore of the backup copy* in other to reduce the time of recovering a failed database data set.


Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham
March 4, 2004


SHAHID ALAM
PRIMARY EXAMINER